

INTEGRATED CIRCUIT CAPACITORS HAVING A DIELECTRIC LAYER BETWEEN A U-SHAPED LOWER ELECTRODE AND A SUPPORT LAYER

Abstract

Integrated circuit capacitors are provided having an electrically insulating electrode support layer having an opening therein on an integrated circuit substrate. A

5 U-shaped lower electrode is provided in the opening and a first capacitor dielectric layer extends on an inner surface and an outer portion of the U-shaped lower electrode. A second capacitor dielectric layer extends between the outer portion of the U-shaped lower electrode and the first capacitor dielectric and also extends

10 between the outer portion of the U-shaped lower electrode and an inner sidewall of the opening. An upper electrode extends on the first dielectric layer.